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AOA

Environmental
Planning &
Landscape
Architecture



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AOA-4660

Darren Ludwigsen
Summit Homes of Washington, LLC
16000 Christensen Road, Suite 303
Tukwila, WA 98188

**SUBJECT: Final Critical Areas Study for Jazz Run Subdivision
Parcels 222406-9098, -9126, and -9048
City of Issaquah, WA (PRE14-00008)**

Dear Darren:

On July 8, 2014 I conducted an initial wetland reconnaissance on the subject property utilizing the methodology outlined in the May 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*. Additional field investigations were conducted on September 29 and November 7, 2014.

One wetland (Wetland A) was identified and delineated throughout the southwestern portion of the site. The wetland boundary was subsequently surveyed and is depicted on **Drawing W1.1**.

Wetland A is part of a larger wetland system that extends off-site to the east, south, and west. The on-site portion of the wetland slopes down from north to south with most of the wetland nearly flat. Vegetation within the on-site wetland consisted of a palustrine emergent plant community dominated by monotypic reed canarygrass (*Phalaris arundinacea*) with patches of cattail (*Typha latifolia*). Hydrology within Wetland A varied from seasonally saturated near the surface along the perimeter to permanently ponded in the interior portion of the wetland.

Attachment A contains data sheets prepared for representative locations in both the upland and wetland. These data sheets document the vegetation, soils, and hydrology information that aided in the wetland boundary delineation.

Wetland A has been approved as a Category II wetland with less than 20 Habitat Points as part of the review associated with the McBride Subdivision to the east.

Category II wetlands with less than 20 Habitat Points require a standard 75-foot buffer plus 15-foot building setback per IMC 18.10.640.C.

Proposed Wetland Buffer Reduction

Due to the highly degraded condition of most of the wetland and its buffer, a buffer and wetland enhancement plan has been prepared that should significantly increase the habitat value of the buffer over current conditions. The City of Issaquah allows for the standard buffer for Category II wetlands to be reduced by a maximum of 25% per IMC 18.10.650.D.1 if the conditions of IMC 18.10.650.D.3.b are met.

The entire central and eastern portion of the wetland buffer currently consists of periodically mowed pasture area interspersed with patches of Himalayan blackberry (*Rubus armeniacus*). This degraded buffer does not currently provide a significant habitat area or provide critical stormwater storage, erosion control, or groundwater recharge functions to the wetland. The buffer does provide some limited water quality protection functions to the wetland, but the proposed stormwater facilities adjacent to the buffer would treat all collected runoff prior to discharge and this function would continue post-development.

Although the far western portion of the buffer is forested, the total area of degraded buffer is well over 40% and meets the applicability criteria of IMC 18.10.650.D.3.b.(1)(A).

As part of the proposed buffer enhancement plan, a variety of dense native trees and shrubs would be planted throughout the degraded portion of the buffer. In addition, willow cuttings would be planted throughout the reed canarygrass portion of the wetland. Implementation of the buffer enhancement plan should significantly increase the plant species and structural diversity of the buffer over current conditions and increase the overall wildlife habitat of the wetland and its buffer.

Trail in Buffer

As part of the proposed project, a pedestrian trail would be installed within the outer part of a small portion of the buffer. Pedestrian trails are allowed within wetland buffers per IMC 18.10.610.B.5 if there is no loss of buffer function and the buffer area impacted by the trail is replaced. The portion of the trail located within the buffer would be constructed within the existing pasture and would have no impact on significant vegetation.

As part of the proposed trail construction, 810 s.f. of buffer area would be impacted and replaced with 910 s.f. of additional enhanced buffer.

Monitoring, Maintenance, and Contingency

As part of the proposed project, a 5-year monitoring, maintenance, and contingency plan has been developed for the proposed enhancement area (see **Drawing W2.2**).

HYDROLOGIC ASSESSMENT

As part of the Jazz Run project, the collected stormwater from the site will be discharged into wetlands located within the area's contributing basin. Most of the runoff will be discharged into Wetland A on the subject property, with a small amount discharged into a ditch that drains into Wetland C located on the adjacent property off-site to the east.

Based on a review of the proposed stormwater plan and conversations with Don Proctor, Project Engineer with Mead & Hunt, Inc., it is my understanding that the discharge volumes into Wetland A following construction will exceed those of the existing conditions. It is also my understanding that although the volumes will increase to this wetland, the depth of ponding will not significantly increase due to the wetlands location on a slope.

The higher volumes will ensure that the wetland continues to receive hydrologic support post-construction. Vegetation within Wetland A is dominated by monotypic reed canarygrass with patches of cattail. Since these species can tolerate significant hydrologic fluctuations, any increase in discharge volume should not negatively impact existing vegetation. In addition, the proposed willow cuttings within the enhanced wetland should also benefit from increased hydrologic support.

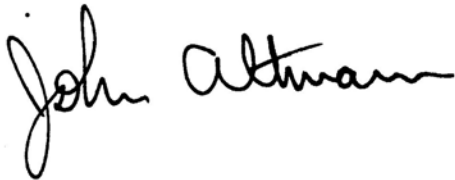
The total volume of runoff into the ditch that drains into Wetland C off-site to the east is anticipated to be less following construction. However, according to the Mead & Hunt storm report, runoff from the Jazz Run site does not appreciably contribute directly to Wetland C except at the lowest locations adjacent to the ditch.

Per the critical areas study prepared for the McBride project site, Wetland C consists of an emergent plant community dominated by grasses, soft rush, creeping buttercup, and field horsetail. Although there may be a minor reduction in hydrologic support to Wetland C, it is not anticipated to impact the existing plant community which is tolerant of water level fluctuations.

If you have any questions, please give me a call.

Sincerely,

ALTMANN OLIVER ASSOCIATES, LLC

A handwritten signature in black ink that reads "John Altmann". The signature is written in a cursive, flowing style.

John Altmann
Ecologist

Attachments